10-MINUTE CONSULTATION

Collapse with loss of awareness

Dougall McCorry,[1] Angela McCorry[2]

[1]Department of Neurosciences, The Walton Centre, Liverpool L9 7LJ
[2]Mather Avenue Surgery, Liverpool
Correspondence to: D McCorry
d.j.mccorry@liv.ac.uk

BMJ 2007:334:153
doi:10.1136/bmj.39070.390961.DE

A 24 year old woman attends your surgery after having collapsed and blacked out the day before at the department store where she works as a sales assistant. Colleagues told her that she had twitched and jerked.

General points

- Vasovagal syncope (simple faint) accounts for most collapses with loss of awareness in patients of good general health. Vasovagal syncope can be confused with other, more serious causes of collapse with loss of awareness, such as seizures and cardiac syncope
- Accounts of the incident from witnesses, as well as from the patient, are important in reaching a diagnosis
- A collapse is a dramatic event, and terms such as "fitting" and "seizure" may be used. It is important to get a description rather than a label
- Develop a mind's eye view of events before, during, and after the attack

What issues you should cover

What was the patient doing when it happened?—To make a confident diagnosis of vasovagal syncope, expect a precipitating factor such as prolonged standing, dehydration, heat, fear, or pain. Cardiac syncope and seizures are usually spontaneous; collapse during exercise is a "red flag" sign for cardiology referral.

What was the patient's last memory?—Expect a prodrome in vasovagal syncope. Common precursor symptoms are light headedness, feeling hot, nausea, and dizziness. Just before losing consciousness the patient may experience dulled hearing and changed vision (blurring, spots, or dull vision). Cardiac syncope usually has no warning, although palpitations or light headedness may be recalled. Similarly, seizures often have no warning, although they can be preceded by an aura such as a déjà vu experience or a rising sensation in the abdomen.

What did the eyewitnesses see?—Vasovagal syncope occurs in a standing or sometimes a sitting position. It is associated with pallor and brief loss of consciousness. Twitching and jerking are often seen; this can be prolonged if during the collapse the head remains above the level of the heart. Falling stiffly followed by sustained, rhythmical jerking of all the limbs indicates a tonic-clonic seizure. A collapse with loss of awareness but no motor phenomena would be highly unlikely to be a seizure. Pallor and brief twitching may be seen in cardiac syncope.

What was the patient's first memory on coming round?—Tonic-clonic seizures are followed by a period of confusion, disorientation, and amnesia. Determine this from a witness and clarify the patient's first clear memories. After vasovagal syncope individuals may feel sick and sweaty, then tired for many hours, but immediately on coming round they can recollect conversations and events that took place before the event.

DIFFERENTIATING SEIZURE FROM SYNCOPE

Unhelpful features—often mistakenly thought to indicate seizure but can occur in syncope

- Twitching and jerking
- Incontinence (reflects a full bladder at the time of the event)
- Pallor
- Bitten tip of tongue
- Fatigue after the event

Helpful features—indicate a seizure

- Confusion after the event lasting >2 minutes
- Deeply bitten lateral border of the tongue
- Tonic then clonic movement lasting >1 minute
- Deep cyanosis

What you should do

Examination—Patients who have had vasovagal syncope or a seizure usually have no abnormal examination findings. The purpose of examination is to reassure the patient and to look for signs of cardiac disease that indicate cardiac syncope. Check pulse, lying and standing blood pressure, and heart sounds.

Investigation—In cases of vasovagal syncope investigation results should be normal. Only occasionally is there an underlying cause. Consider checking full blood count and urea, electrolytes, and glucose concentrations and doing a pregnancy test. The guidelines of the UK National Institute for Health and Clinical Excellence suggest electrocardiography in all collapses with loss of awareness to check for abnormalities such as arrhythmias and long QT syndrome.

Management—A clear explanation and reassurance are important, as vasovagal syncope can be frightening. Advise her to lie down should warning symptoms occur again and to avoid the precipitants. If you suspect cardiac syncope or seizure then refer her to the appropriate specialist and advise her not to drive until she has been seen.

USEFUL READING

Lempert T. Recognising syncope: pitfalls and surprises. *Journal of the Royal Society of Medicine* 1996;89:372-4

National Institute for Health and Clinical Excellence. The epilepsies: the diagnosis and management of the epilepsies in adults and children in primary and secondary care. www.nice.org.uk/page.aspx?o=CG020 (Appendix A, "Differential diagnosis of epilepsy in adults and children," and Appendix E, "Key clinical questions")

This is part of a series of occasional articles on common problems in primary care
The *BMJ* welcomes contributions from general practitioners to the series